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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

|  |    |                        |                 |
|--|----|------------------------|-----------------|
|  |    | Application Number     | 10/606,467      |
|  |    | Filing Date            | June 30, 2004   |
|  |    | First Named Inventor   | Xing Yuan       |
|  |    | Art Unit               | 2832            |
|  |    | Examiner Name          | Ramon M Barrera |
| Total Number of Pages in This Submission | 10 | Attorney Docket Number | IGC-102         |

### ENCLOSURES (Check all that apply)

|  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input checked="" type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance communication to Technology Center (TC)<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="text"/> Remarks   |  |  |

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

|                         |                       |
|-------------------------|-----------------------|
| Firm or Individual name | George L Rideout, Jr. |
| Signature               |                       |
| Date                    | May 24 2004           |

### CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

|                       |                       |      |             |
|-----------------------|-----------------------|------|-------------|
| Typed or printed name | George L Rideout, Jr. |      |             |
| Signature             |                       | Date | May 24 2004 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$0)

## Complete if Known

|                      |                 |
|----------------------|-----------------|
| Application Number   | 10/606,467      |
| Filing Date          | June 30, 2004   |
| First Named Inventor | Xing Yuan       |
| Examiner Name        | Ramon M Barrera |
| Art Unit             | 2832            |
| Attorney Docket No.  | IGC-102         |

## METHOD OF PAYMENT (check all that apply)

 Check  Credit card  Money Order  Other  None

 Deposit Account:

|                        |       |
|------------------------|-------|
| Deposit Account Number | _____ |
| Deposit Account Name   | _____ |

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) or any underpayment of fee(s)  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description  | Fee Paid |
|----------|----------|----------|----------|--|----------|
| 1051     | 130      | 2051     | 65       | Surcharge - late filing fee or oath  | _____    |
| 1052     | 50       | 2052     | 25       | Surcharge - late provisional filing fee or cover sheet                     | _____    |
| 1053     | 130      | 1053     | 130      | Non-English specification  | _____    |
| 1812     | 2,520    | 1812     | 2,520    | For filing a request for ex parte reexamination                            | _____    |
| 1804     | 920*     | 1804     | 920*     | Requesting publication of SIR prior to Examiner action                     | _____    |
| 1805     | 1,840*   | 1805     | 1,840*   | Requesting publication of SIR after Examiner action                        | _____    |
| 1251     | 110      | 2251     | 55       | Extension for reply within first month                                     | _____    |
| 1252     | 420      | 2252     | 210      | Extension for reply within second month                                    | _____    |
| 1253     | 950      | 2253     | 475      | Extension for reply within third month                                     | _____    |
| 1254     | 1,480    | 2254     | 740      | Extension for reply within fourth month                                    | _____    |
| 1255     | 2,010    | 2255     | 1,005    | Extension for reply within fifth month                                     | _____    |
| 1401     | 330      | 2401     | 165      | Notice of Appeal   | _____    |
| 1402     | 330      | 2402     | 165      | Filing a brief in support of an appeal                                     | _____    |
| 1403     | 290      | 2403     | 145      | Request for oral hearing   | _____    |
| 1451     | 1,510    | 1451     | 1,510    | Petition to institute a public use proceeding                              | _____    |
| 1452     | 110      | 2452     | 55       | Petition to revive - unavoidable   | _____    |
| 1453     | 1,330    | 2453     | 665      | Petition to revive - unintentional   | _____    |
| 1501     | 1,330    | 2501     | 665      | Utility issue fee (or reissue)   | _____    |
| 1502     | 480      | 2502     | 240      | Design issue fee   | _____    |
| 1503     | 640      | 2503     | 320      | Plant issue fee  | _____    |
| 1460     | 130      | 1460     | 130      | Petitions to the Commissioner  | _____    |
| 1807     | 50       | 1807     | 50       | Processing fee under 37 CFR 1.17(q)  | _____    |
| 1806     | 180      | 1806     | 180      | Submission of Information Disclosure Stmt                                  | _____    |
| 8021     | 40       | 8021     | 40       | Recording each patent assignment per property (times number of properties) | _____    |
| 1809     | 770      | 2809     | 385      | Filing a submission after final rejection (37 CFR 1.129(a))                | _____    |
| 1810     | 770      | 2810     | 385      | For each additional invention to be examined (37 CFR 1.129(b))             | _____    |
| 1801     | 770      | 2801     | 385      | Request for Continued Examination (RCE)                                    | _____    |
| 1802     | 900      | 1802     | 900      | Request for expedited examination of a design application                  | _____    |

SUBTOTAL (1) (\$0)

| Extra Claims       |    | Fee from below | Fee Paid |
|--------------------|----|----------------|----------|
| Total Claims       | 17 | -20** = 0      | X 18 = 0 |
| Independent Claims | 3  | -3** = 0       | X 86 = 0 |
| Multiple Dependent |    | 290            | = 0      |

| Large Entity  | Small Entity  | Fee Description   |
|---------------|---------------|---|
| Fee Code (\$) | Fee Code (\$) |   |
| 1202          | 18            | 2202 9 Claims in excess of 20                                     |
| 1201          | 86            | 2201 43 Independent claims in excess of 3                         |
| 1203          | 290           | 2203 145 Multiple dependent claim, if not paid                    |
| 1204          | 86            | 2204 43 ** Reissue independent claims over original patent        |
| 1205          | 18            | 2205 9 ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$0)

\*\*or number previously paid, if greater; For Reissues, see above

SUBTOTAL (3) (\$0)

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

(Complete if applicable)

|                   |                        |                                   |       |           |              |
|-------------------|------------------------|-----------------------------------|-------|-----------|--------------|
| Name (Print/Type) | George L Rideout, Jr.  | Registration No. (Attorney/Agent) | 43880 | Telephone | 502-452-7792 |
| Signature         | George L. Rideout, Jr. |                                   |       | Date      | May 24 2004  |

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Atty. Dkt. No. IGC-102  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Xing Yuan, et al. :  
Serial No.: 10/606,467 : Art Unit: 2832  
Filed: June 30, 2003 : Examiner: Ramon M Barrera  
For: Method and Apparatus To Trigger  
Superconductors In Current Limiting Devices :  
:

## Amendment

Commissioner for Patents  
PO Box 1450  
Alexandria VA 22313-1450

### In the Specification

Before Paragraph [001] please insert the following paragraph.

The U.S. Government has a paid-up license in this invention and the right in limited circumstances to require the patent owner to license others on reasonable terms as provided for by the terms of Contract No. DE-FC36-03G013033 awarded by the Department of Energy.

Please replace paragraph [0006] as follows.

[0006] US patent application 2003/0021074A1 (Serial No. 10/051,671) published January 30, 2003, 6,664,875, assigned to the assignee of the present invention, and entitled "Matrix-type Superconducting Fault Current Limiter," herein incorporated by reference, describes a mechanism that combines all three of the quenching factors of a superconductor, namely current, magnetic field and temperature, to achieve more uniform quenching of the superconductor during current limiting. This MFCL uses a magnetic field as a major one of the triggering